

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

1875.4070001

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on _____

Signature _____

Typed or printed name _____

Application Number

Filed

10/809,685

March 26, 2004

First Named Inventor

Thomas KOLZE

Art Unit

Examiner

2462

Leon T. Andrews

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

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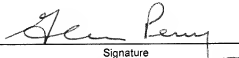
☐ applicant/inventor.

☐ assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/95)

☒ attorney or agent of record.
Registration number 28,458
☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____



Signature

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19 Feb 2010

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.

Submit multiple forms if more than one signature is required, see below*.

☒ *Total of One (1) forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Kolze *et al.*

Appl. No.: 10/809,685

Filed: March 26, 2004

For: **Method and Apparatus for
Maintaining Synchronization in a
Communication System**

Confirmation No.: 7878

Art Unit: 2462

Examiner: Leon T. Andrews

Atty. Docket: 1875.4070001

Arguments to Accompany the Pre-Appeal Brief Request for Review

Mail Stop AF

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby submit the following Arguments, in five (5) or less total pages, as attachment to the Pre-Appeal Brief Request for Review Form (PTO/SB/33). A Notice of Appeal is concurrently filed.

Arguments

Applicants' arguments in the Amendment and Reply under 37 C.F.R. §1.111 filed on July 27, 2009 (hereinafter "Reply"), were not properly considered or responded to by the Examiner in the final Office Action mailed December 1, 2009 (hereinafter the "Office Action"). In the Office Action, claims 1, 9-11, and 20-36 were rejected under 35 U.S.C. §102(b) in view of U.S. Pub. No. 2001/0033611 ("Grimwood"). Claim 2 was rejected under 35 U.S.C. §103(a) in view of Grimwood and U.S. Pat. No. 6,539,050 ("Lee"). The Examiner's response was legally and factually deficient because the Examiner failed to show that the cited references taught or suggested all the features of the claims.

Independent claim 1 recites, for example:

transmitting a first downstream signal using the first downstream transmitter in the central entity to the one or more remote devices, wherein the

first downstream signal includes timing information based on the first symbol clock; ... and

transmitting a second downstream signal using the second downstream transmitter in the central entity to the one or more remote devices, wherein the second signal includes timing information based on the second symbol clock.

Independent claim 9 recites, for example:

a first downstream transmitter configured to transmit a first downstream signal to one or more remote devices, wherein the first downstream signal includes first timing information based on a first symbol clock of the first downstream transmitter;

a second downstream transmitter configured to transmit a second downstream signal to the one or more remote devices, wherein the second downstream signal includes second timing information based on a second symbol clock of the second downstream transmitter

Descriptions of these features can be found, for example, in Applicants' originally filed application at [0041]-[0043], FIG. 2 (First Downstream Transmitter 290a and Second Downstream Transmitter 290b), FIGS. 5-7, and throughout the originally filed application.

Grimwood fails to disclose or suggest first and second downstream transmitters. Grimwood is directed to a system including a central unit ("CU") communicating with remote units ("RUs"). (Grimwood, [0003], stating that "different remote units (RUs) at differing distances from a central unit (CU)".) The CU and the one or more RUs are coupled via "shared media" forming upstream and downstream channels. (See also, e.g., Grimwood, [0012], [0048] - [0051], [0077], FIGS. 1, 2, and 4, etc.). Grimwood describes downstream in terms of a CU transmitting downstream to RUs, and describes upstream in terms of RUs transmitting upstream to the CU (see, e.g., [0003] and [0004] of Grimwood for use of upstream and downstream in context). Grimwood further discloses, as to downstream in particular, that the CU sends downstream data, including a downstream clock, along shared media to an RU, and the RU uses the downstream data to generate a recovered downstream clock at the RU (see, e.g., Grimwood [0048]-[0049]).

In contrast to the claimed first and second downstream transmitters in a central entity, Grimwood fails to disclose that the CU has more than one downstream transmitter. For example, see Grimwood, [0265] ("the downstream carrier generated by the CU transmitter"). Furthermore, no figure in Grimwood shows the existence of first and second downstream transmitters in the CU. See, for example, FIGS. 1, 2, and 4 of Grimwood illustrating portions of both the RU and the CU.

The Office Action, at page 2, states that Grimwood allegedly discloses a second downstream transmitter in the central entity:

Grimwood et al. discloses ... a second symbol clock (symbol clock on line 399, [0183], page 18, line 2; symbol clock on line 455 in accordance with downstream messages, [0183], page 18, lines 10-12) of a second downstream transmitter (transmitter coupled to the symbol clock on line 399, [0183], page 18, lines 1-2) in the central entity (all clocks being synchronized in the CU, paragraph [0020], page 3, lines 3-5);

Paragraph [0020] of Grimwood, cited by the Office Action, discloses (emphasis added): "all clock and carrier information in both the RU and CU being synchronized to *one master clock in the CU*." Thus, consistent throughout Grimwood's application, Grimwood discloses one master clock in the CU, to which all clock and carrier information is synchronized. Accordingly, Applicants respectfully submit that Grimwood fails to teach or suggest "all clocks being synchronized in the CU," as stated at page 2 of the Office Action.

Regarding [0183] of Grimwood, cited by the Office Action, the reference numerals therein correspond to FIG. 13 of Grimwood, which illustrates an *upstream* transmitter at an RU, which, therefore, is not a *second downstream* transmitter at the CU. For example, Grimwood discloses that "[t]he transmitter of FIG. 13 ... is able to ... send the *upstream* data at a variable *upstream* symbol clock rate ... , (emphasis added; Grimwood, [0182]). Furthermore, Grimwood describes FIG. 13 as "an ... *RU upstream* transmitter" at [0032]

(emphasis added); "[r]eferring to FIG. 13, there is shown a block diagram of the preferred form of *RU* SCDMA transmitter for *upstream* transmissions, (emphasis added; Grimwood, [0180]). Thus, FIG. 13 does not illustrate a second *downstream* transmitter in a *CU*, and, accordingly, [0183] does not teach or suggest a second *downstream* transmitter in a *central entity*, as recited in the claims.

The Office Action at pp. 2-5, 7, and 9 states, for example, "transmitter couple[d] to symbol clock on line 399 in an 802.14 type CU, [0183], page 18, lines 1-2, lines 8-9," (Office Action, p. 9). However, as set forth above, the transmitter referred to in [0183] of Grimwood is an *RU upstream* transmitter, and therefore is not a "transmitter ... in an 802.14 type *CU*," as stated in the Office Action.

Regarding the signal on line 399 cited by the Office Action, Grimwood does not teach or suggest that the signal is associated with a second downstream transmitter in the CU. On the contrary, Grimwood discloses that timebase 401 generates signal 399 based on "the *synthesized* upstream clock which is generated from and phase coherent with the *recovered* downstream clock," (emphasis added; Grimwood, [0183]). Grimwood discloses that the timebase is associated with the RU, not the CU: "the *RU* waits for another ranging invitation, and then increments its transmit frame timing delay value in *its* timebase," (emphasis added; Grimwood, [0259]). Thus, line 399 illustrated in FIG. 13 of Grimwood does not teach or suggest a second *downstream* transmitter in a *central entity*.

The Office Action further states "symbol clock on line 455 in accordance with downstream messages," (Office Action, pp. 2 and 9). However, Grimwood does not appear to describe a line 455. FIG. 13 of Grimwood illustrates a line 405, "SYMBOL CLOCK RATE SELECT." Even assuming that the Office Action intended line 405, the signal on line 405 is not associated with a second downstream transmitter in a central entity. Grimwood

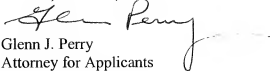
discloses "[a] symbol clock rate select signal on line 405 generated by ... a *processor 408* in accordance with downstream messages from the headend," (emphasis added; Grimwood, [0183]). However, Grimwood illustrates processor 408 in the *RU* upstream transmitter of FIG. 13. Accordingly, line 405 does not teach or suggest a second *downstream* transmitter, in a *central entity* (claim 1), or configured to transmit a second downstream signal (claim 9).

Thus, Grimwood fails to disclose a second downstream transmitter as recited in claims 1 and 9, and claims 1 and 9 are therefore patentable over Grimwood under 35 U.S.C. §102(b). Claims 10, 11, and 20-36 depend from claims 1 and 9, respectively, and are also patentable over Grimwood for at least the above reasons, and further in view of their own features. Claim 2 also depends from claim 1. Lee fails to resolve the deficiencies noted above regarding Grimwood in view of claim 1. For at least the above reasons, and further in view of its own features, dependent claim 2 is patentable over the combination of Grimwood and Lee. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) are therefore respectfully requested.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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